$$\frac{\text{The fraction of Ajax vehicles using the 300-2 bbl, engine which fall in the 3,500 lb inertia weight class with an automatic transmission.}}{\text{Fuel economy for 300-2 bbl, 3,500 lb automatic transmission base level.}} + \frac{\text{The fraction of Ajax vehicles which fall in the 4,000 lb inertia weight class with an automatic transmission.}}{\text{Fuel economy for 300-2 bbl, 4,000 lb automatic transmission base level.}} =$$

$$\text{Ajax, 300-2 barrel, automatic, MPG} = \frac{1}{\dfrac{0.3000}{15.9020} + \dfrac{0.7000}{13.8138}} = 14.3803$$

Similarly,

Ajax, 300-2 barrel, manual MPG = 16.1 16 MPG [1]

$$\text{Dodo, 300-2 barrel, manual MPG} = \frac{1}{\dfrac{0.4000}{16.1001} + \dfrac{0.6000}{14.6840}} = 15.2185, \ 15 \ \text{mi/gal} \ [1]$$

$$\text{Dodo, 300-2 barrel, automatic MPG} = \frac{1}{\dfrac{0.3000}{15.9020} + \dfrac{0.7000}{13.8138}} = 14.3803, \ 14 \ \text{mi/gal} \ [1]$$

Boredom III, 300-2 barrel, manual MPG = 14.6840, 15 mi/gal[1]

$$\text{Boredom III, 300-2 barrel, automatic MPG} = \frac{1}{\dfrac{0.2500}{13.8138} + \dfrac{0.7500}{13.2203}} = 13.3638, \ 13 \ \text{mi/gal} \ [1]$$

$$\text{Castor, 300-2 barrel, automatic MPG} = \frac{1}{\dfrac{0.2000}{13.2203} + \dfrac{0.8000}{10.6006}} = 11.0381, \ 11 \ \text{mi/gal} \ [1]$$

Note that even though no Dodo was actually tested, this approach permits its fuel economy figure to be estimated, based on the inertia weight distribution of projected Dodo sales within a specific engine and transmission grouping.

[1] The model type fuel economy values, rounded to the nearest mile per gallon, are the fuel economy values as used on general labels for that model year.